ABSTRACT

Microwave signals are coupled from a microwave module to a microstrip transmission line, each installed on a chassis plate. The microwave signals are fed through the bottom or side of the microwave module using a feedthrough pin mounted in the module. The feedthrough pin extends from the microwave module interior into a channel defined in the chassis plate and to a microstrip line on the opposite side of the plate. An electrically conductive gasket is placed about the feedthrough pin between the microwave module and chassis plate to reduce signal leakage and enhance ground continuity. An insulating sleeve is installed about the feedthrough pin in the chassis plate channel and provides a nominal clearance (e.g., 0.005 inches) within that channel to allow for manufacturing and assembly tolerances and to enable feedthrough impedance to be substantially insensitive to the position of the feedthrough pin and insulating sleeve within the channel.